WHAT IS CLAIMED IS:

1. A linear actuator comprising:

a direct current (DC) motor having a stator and a rotor, said stator fixed to a reference frame;

a threaded shaft coupled to said rotor;

a torsion spring disposed perpendicular to said axis of said threaded shaft, said torsion spring comprising a center portion coaxially attached to said threaded shaft and an outer portion attached to said reference frame;

a translation actuator threadedly coupled to said threaded shaft, said actuator rotationally stopped and operable to laterally translate in response to rotation of said threaded shaft by said DC motor;

2. The linear actuator of claim 1, wherein said torsion spring stores rotational energy from DC motor when said DC motor rotates said threaded shaft in a first rotary direction, said torsion spring returning rotational energy to said shaft in a second rotary direction when said DC motor is un-energized;

3. The linear actuator of claim 1, wherein said translation actuator further comprises a portion operable to engage a mechanical load.

4. The linear actuator of claim 1, wherein said threaded shaft is coaxially coupled to a rotational shaft stop, said shaft stop having a first and second shaft stop surface.

5. The linear actuator of claim 4, said linear actuator further comprises a first and a second actuator stop, said first actuator stop contacting said first shaft stop surface in a first translation position and said second actuator stop contacting said second shaft stop surface at a second translation position, wherein a first and second force resulting from said first and second actuator stops contacting said first and second shaft stop surfaces, respectively, act tangential to a radius vector of said threaded shaft.

6. The linear actuator of claim 5, where an application of a drive voltage pulse to said DC motor drives said linear actuator in a first direction until said second actuator stop contacts said second shaft stop surface and removing said drive voltage pulse releases said stored rotational energy in said torsion spring, said stored rotational energy driving said linear actuator in a second direction until said first actuator contacts said first shaft stop surface.

7. A linear translating actuator comprising:

a direct current (DC) motor having a stator and a rotor, said stator fixed to a reference frame;

a shaft rotatably coupled to said rotor;

an energy storing means for storing rotational energy from DC motor when said DC motor rotates said shaft in a first rotary direction, said energy storing means returning rotational energy to said shaft in a second rotary direction when said DC motor is un-energized;

a conversion means for converting rotation motion of said shaft to an actuator lateral translation motion;

8. The linear actuator of claim 7, wherein said actuator further comprises an end portion operable to engage a mechanical load.

9. The linear actuator of claim 7, wherein said shaft is coaxially coupled to a rotational shaft stop, said shaft stop having a first and a second shaft stop surface.

10. The linear actuator of claim 9, said linear actuator further comprises a first and a second actuator stop, said first actuator stop contacting said first shaft stop surface in

a first translation position and said second actuator stop contacting said second shaft stop surface at a second translation position, wherein a first and second force resulting from said first and second actuator stops contacting said first and second shaft stop surfaces, respectively, act tangential to a radius vector of said threaded shaft

11. The linear actuator of claim 10, where an application of a drive voltage pulse to said DC motor drives said linear actuator until said second actuator stop contacts said second shaft stop surface and removing said drive voltage pulse releases said stored rotational energy in said torsion spring, said stored rotational energy driving said linear actuator until said first actuator contacts said first shaft stop surface.

12. The linear actuator of claim of claim 7, wherein said energy storage means comprises a torsion spring, wherein a center portion of said torsion spring is coaxially coupled to said shaft and an outer portion of said torsion spring is coupled to said reference frame.

13. The linear actuator of claim of claim 7, wherein said energy storage means comprises a elastic strip having a first and a second end, said elastic strip fixed to said frame at said first end and to said shaft at said second end, said elastic strip wrapping said shaft when said shaft is rotated in said first rotation direction, said elastic strip stretching and thus storing energy.

14. The linear actuator of claim of claim 7, wherein said energy storage means comprises a linear spring having a first end and a second end, said linear spring fixed to said frame at said first end and fixed to a inelastic cord at said second end, said inelastic cord wrapping said shaft when said shaft is rotated in said first rotation direction extending said linear spring, said linear spring elongating thus storing energy.

15. The linear actuator of claim 7, wherein said conversion means comprises a threaded screw member coupled to said shaft and a rotationally retained actuator, said actuator threadedly coupled to said threaded screw member.

16. A point of sales (POS) terminal comprising:

a sliding cash drawer;

a latch for capturing said cash drawer in closed position, said sliding cash drawer spring biased towards an open position;

a lever attached to said latch, said lever operable to release said latch, allowing said spring to open said cash drawer, when said lever is moved in a first direction and further said latch operable to set said latch in a position to capture said cash drawer when said lever is moved in a second direction; and

an electrically driven linear actuator for moving said lever in said first and second directions, said electrically driven linear actuator comprising;

a direct current (DC) motor having a stator and a rotor, said stator fixed to a reference frame;

a threaded shaft coupled to said rotor;

a torsion spring disposed perpendicular to said axis of said threaded shaft, said torsion spring comprising a center portion coaxially attached to said threaded shaft and an outer portion attached to said reference frame;

a translation actuator threadedly coupled to said threaded shaft, said actuator rotationally stopped and operable to laterally translate in response to rotation of said threaded shaft by said DC motor;

17. The point of sales terminal of claim 16, wherein said torsion spring stores rotational energy from DC motor when said DC motor rotates said threaded shaft in a first rotary direction, said torsion spring returning rotational energy to said shaft in a second rotary direction when said DC motor is un-energized;

18. The point of sales terminal of claim 16, wherein said translation actuator further comprises a portion operable to engage a mechanical load.

19. The point of sales terminal of claim 16, wherein said threaded shaft is coaxially coupled to a rotational shaft stop, said shaft stop having a first and a second shaft stop surface.

20. The point of sales terminal of claim 19, said point of sales terminal further comprises a first and a second actuator stop, said first actuator stop contacting said first shaft stop surface in a first translation position and said second actuator stop contacting

said second shaft stop surface at a second translation position, wherein a first and second force resulting from said first and second actuator stops contacting said first and second shaft stop surfaces, respectively, act tangential to a radius vector of said threaded shaft

21. The point of sales terminal of claim 20, where an application of a drive voltage pulse to said DC motor drives said linear actuator in a first direction until said second actuator stop contacts said second shaft stop surface and removing said drive voltage pulse releases said stored rotational energy in said torsion spring, said stored rotational energy driving said linear actuator in a second direction until said first actuator contacts said first shaft stop surface.

22. A point of sales (POS) terminal comprising:

a sliding cash drawer;

a latch for capturing said cash drawer in closed position, said sliding cash drawer spring biased towards an open position;

a lever attached to said latch, said lever operable to release said latch, allowing said spring to open said cash drawer, when said lever is moved in a first direction and further said latch operable to set said latch in a position to capture said cash drawer when said lever is moved in a second direction; and

an electrically driven linear actuator for moving said lever in said first and second directions, said electrically driven linear actuator comprising;

a direct current (DC) motor having a stator and a rotor, said stator fixed to a reference frame;

a shaft rotatably coupled to said rotor;

an energy storing means for storing rotational energy from DC motor when said DC motor rotates said shaft in a first rotary direction, said

energy storing means returning rotational energy to said shaft in a second rotary direction when said DC motor is un-energized;

a conversion means for converting rotation motion of said shaft to an actuator lateral translation motion;

23. The point of sales terminal of claim 22, wherein said actuator further comprises an end portion operable to engage a mechanical load.

24. The point of sales terminal of claim 22, wherein said shaft is coaxially coupled to a rotational shaft stop, said shaft stop having a first and a second shaft stop surface.

25. The point of sales terminal of claim 24, said linear actuator further comprises a first and a second actuator stop, said first actuator stop contacting said first shaft stop surface in a first translation position and said second actuator stop contacting said second shaft stop surface at a second translation position, wherein a first and second force resulting from said first and second actuator stops contacting said first and second shaft stop surfaces, respectively, act tangential to a radius vector of said threaded shaft

26. The point of sales terminal of claim 25, where an application of a drive voltage pulse to said DC motor drives said linear actuator until said second actuator stop contacts said second shaft stop surface and removing said drive voltage pulse releases said stored

rotational energy in said torsion spring, said stored rotational energy driving said linear actuator until said first actuator contacts said first shaftstop surface.

27. The point of sales terminal of claim of claim 22, wherein said energy storage means comprises a torsion spring, wherein a center portion of said torsion spring is coaxially coupled to said shaft and an outer portion of said torsion spring is coupled to said reference frame.

28. The point of sales terminal of claim of claim22, wherein said energy storage means comprises a elastic strip having a first and a second end, said elastic strip fixed to said frame at said first end and to said shaft at said second end, said elastic strip wrapping said shaft when said shaft is rotated in said first rotation direction, said elastic strip stretching and thus storing energy.

29. The point of sales terminal of claim of claim 22, wherein said energy storage means comprises a linear spring having a first end and a second end, said linear spring fixed to said frame at said first end and fixed to a inelastic cord at said second end, said inelastic cord wrapping said shaft when said shaft is rotated in said first rotation direction extending said linear spring, said linear spring elongating thus storing energy.

30. The point of sales terminal of claim 22, wherein said conversion means comprises a threaded screw member coupled to said shaft and a rotationally retained actuator, said actuator threadedly coupled to said threaded screw member.